

RECEIVED
CENTRAL FAX CENTER
DEC 16 2008

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A molding process of a composite material including forming a high-thermal conductor compound and a room temperature magnetic refrigerant material compound, wherein said room temperature magnetic refrigerant material is nested with said high-thermal-conductor to obtain said composite material; and wherein said room temperature refrigerant material or high-thermal conductor is processed to particles, sheets, strips, or filaments having a minimum sectional size of from 0.001 mm to 0.1 mm.
2. (Currently Amended) The molding process of claim 1, ~~wherein said room temperature refrigerant material or high-thermal conductor is processed to particles, sheets or filaments of appropriate size by crushing, ball grinding, plasma spray coating or other machining methods to the minimum sectional size of more than 0.001 mm; and wherein the melting point of said high-thermal conductor compound is different from that of higher or lower than said room temperature magnetic refrigerant material compound selected; [[melt]] melting said lower melting point compound high-thermal conductor or room temperature magnetic refrigerant material under a vacuum or an inert atmosphere; [[add]] adding said higher melting point compound to said melted compound room temperature magnetic refrigerant material or high-thermal conductor therein; cool the cooling said melted compound metal fluid containing [[the]] said higher melting point material compound under [[the]] a vacuum or inert atmosphere [[to]] and forming a solid; and machine machining said solid to small balls [[with]] having diameters of less than 0.5 mm.~~
3. (Currently Amended) The molding process of claim 1, wherein said composite material is obtained by stacking multiple sheet units and creating salient

points between said sheet units to form liquid paths; said sheet unit is comprised of comprising two metal said high-thermal-conductor sheets and a liquid thermal conductive agent therebetween; said liquid thermal conductive agent includes including super-paramagnetism or ferromagnetism room temperature magnetic refrigerant particles, sheets or filaments; and pressing said sheet units are pressed completely together at designated points to form and forming small isolated areas.

4. (Currently Amended) The molding process of claim 1, wherein said room temperature magnetic refrigerant material is processed to sheets, strips or filaments; said high-thermal-conductor is inserted between said sheets, strips or filaments; and said high-thermal-conductor and [[the]] said sheets, strips or filaments contact each other closely.

5. (Cancelled).

6. (Currently Amended) The molding process of claim 3, wherein said super-paramagnetism or ferromagnetism room temperature magnetic refrigerant material is cut, crushed, ball grinded, plasma spray coated or processed by physical or chemical methods to particles with the particles size greater than 0.0001 mm; prepare preparing said high-thermal-conductor metal sheets, [[add]] adding said particles into a to said liquid thermal conductive agent, [[seal]] sealing said liquid thermal conductive agent containing said magnetic refrigerant material between said two metal high-thermal-conductor sheets and eempress compressing them [[to]] into sheet units of thickness less than 1 mm; divide dividing said sheets into small isolated areas by completely pressing together the said sheet units at [[the]] said designated points, stack stacking said sheet units and create creating salient points between said sheet units to form said liquid path; said sheets are comprised of copper; the height of the salient points is not more than the thickness of the sheet units and a metal powder with the having a particle size of 0.1-1 mm is spread therebetween; and the thickness of the stacked sheet units [[is]] being between 1 mm and 100 mm.

7. (Original) The molding process of claim 3, wherein the thickness of said sheets is less than 0.1 mm; the thickness of said sheet units is less than 0.2 mm; the thickness of said stacked sheet units is between 1 mm and 100 mm; and said fluid paths exist between said sheet units.
8. (Currently Amended) The molding process of claim 3, wherein the height of said salient points is no more than the thickness of said sheet units; and a metal powder ~~with the~~ having a particle size of 0.1-1 mm is spread between said sheet units.
9. (Currently Amended) The molding process of claim 4, wherein said room temperature magnetic refrigerant material is gadolinium, wherein said high-thermal-conductor is copper; and wherein the thickness of a gadolinium sheets is 5-100 μm ; the thickness of a copper sheet is 5-100 μm ; and said gadolinium sheets and said copper sheets are stacked alternately together.
10. (Currently Amended) The molding process of claim 4, wherein said room temperature magnetic refrigerant material is gadolinium, said high-thermal-conductor is copper; and wherein inserting an aluminum foil is inserted between said gadolinium and copper sheet; and compressing and heating the resulting stacked sheet is ~~then compressed and heated~~ to at least 934 K to melt said aluminum foil and to obtain a closer contact between said gadolinium and said copper sheet
11. (Original) The molding process of claim 10, wherein said stacked sheets are processed to honeycombed shape.
12. (Previously Presented) The molding process of claim 2, wherein the surface of said balls is plated a layer of oxidation proof metal.